



*Elegant Prescriptions for Leading Performance.™*

## Considering Neuroscience to improve Consumer Communications

**FDA**

**Risk Communication Advisory Committee**

February 27, 2009

**AdvanceMarketWorX™**  
*Healthcare and Consumer Disciplines*

[www.advancemarketworx.com](http://www.advancemarketworx.com)

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## What is the current question?

- What CONSTITUTES “USEFUL” written information for consumers/patients to receive with their prescriptions at the pharmacy? And for Medication Guides, Patient Package Inserts (PPI’s) and Consumer Medication Information (CMI)?
- How does the FDA assure that consumers receive useful written info with EVERY prescription?



## A more powerful question?

- How might we better ENTICE consumers to read and understand information ABOUT RISK? To ask questions if/when they don't understand?
- What would BOTH FDA and CONSUMERS consider 'USEFUL' written information? How might we understand whether 'less can be more' in the case of 'useful and easy to understand'?
- How do the above forms of RISK COMMUNICATIONS complement other communications ABOUT RISK in branded advertising that consumers also see e.g. Important Safety Information in branded print ads, brief summary accompanying print ads and possibly major statement in broadcast TV?
  - And how can these improve to help entice consumers and caregivers have a balanced understanding of benefit/risk tradeoffs?



## What is the issue?

Consumers are rushed; they believe that 'they don't have time'

They are exposed daily to ever-more-sophisticated communications.

'Complicated, long and boring' is a death-knell.

**CURRENT PRACTICES ARE LIMITING** consumer comprehension:

- Either they don't read the risk information at all or don't read it in its entirety
- Can't understand it because there is still too much technical jargon and/or it's written with too many words above a 5<sup>th</sup> grade reading level
- There are few visuals included (PROVEN to improve comprehension)
- In an attempt to 'put everything in' and 'cover all legal and regulatory requirements', the risk communications tend to get overloaded

The result: **RISK INFORMATION IS NOT EFFECTIVE**; none or little of it is being read and understood. It's also not consistent across brands/companies.



## Thoughts to consider

Consumer marketers test extensively about what captures consumer attention, what they remember and what motivates action.

Borrowing from the world of Neuroscience, the work of Dr John Medina<sup>1</sup> offers lessons on how the brain comprehends--shedding light on how to provide 'useful' information to consumers

From his 12 brain rules....we'll focus on **4**

<sup>1</sup> Source: Brain Rules by Dr. John Medina; more information at [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.





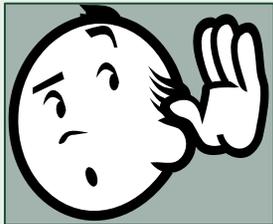
### Rule # 4

**We don't pay attention to boring things.**



### Rule # 5

**Repeat to remember.**



### Rule # 9

**Stimulate more of the senses.**



### Rule # 10

**Vision trumps all other senses.**



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

Hello! My name's Biff.



Agalychnis callidryas

Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

Why me? Three reasons: (1) Let my enormous eyes remind you that **vision** is the most dominant sense for you humans.



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

And (2) allow my remarkable coloring and shape to remind you that you humans are wired to notice **differences** and **patterns...**



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

And (3) let my tiny, primitive brain remind you that, while I get the most use out of my brain (as far as I know), you, my friend, could **learn to use** your massive, evolved brain much more effectively...



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.



**Rule # 4**  
**We don't pay attention to boring things.**



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

## Thoughts to consider

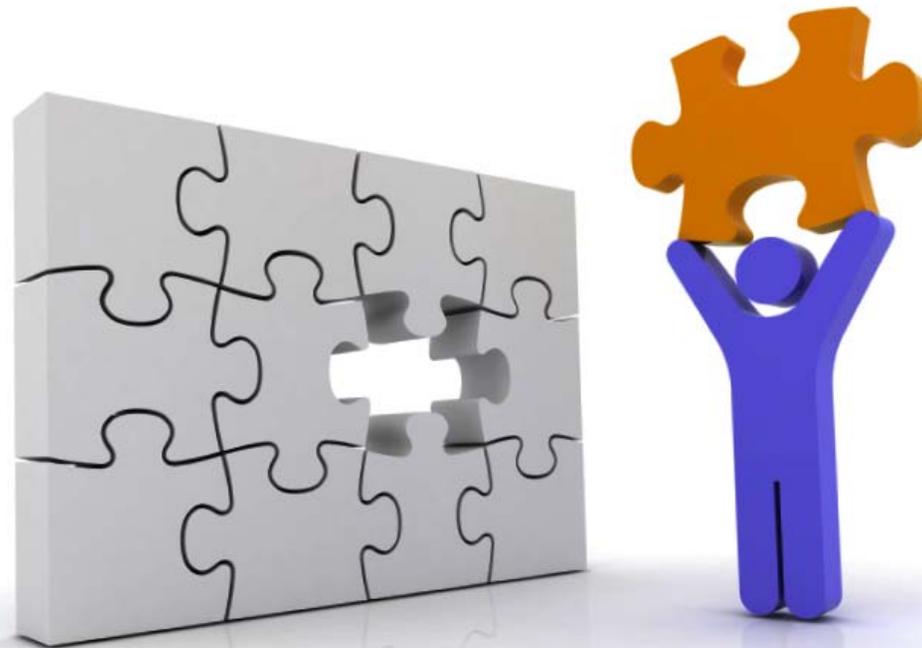
**Structure your presentation around meaning, and the big picture. Then support key ideas with details.**



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

Another aspect of attention...

**We're wired to  
notice patterns**



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

“The brain pays attention to patterns. Remembering something we’ve seen before (like quicksand) is a useful evolutionary trait.”

— Dr. John Medina



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.





**Rule # 5**  
**Repeat to Remember.**



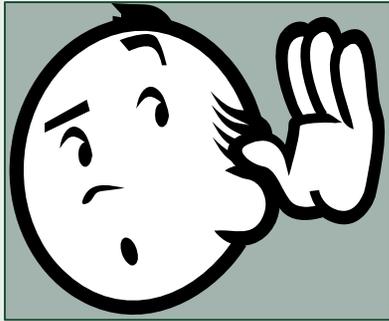


## Rule # 5: Working Memory Repeat to Remember.

There are many types of memory, from autobiographical to declarative to motor memory. Brain Rules focuses on declarative memory (things you can declare, like “ $2+2=4$ ”).

The capacity of working memory is initially **less than 30 seconds**. If we don't repeat the information, it disappears.

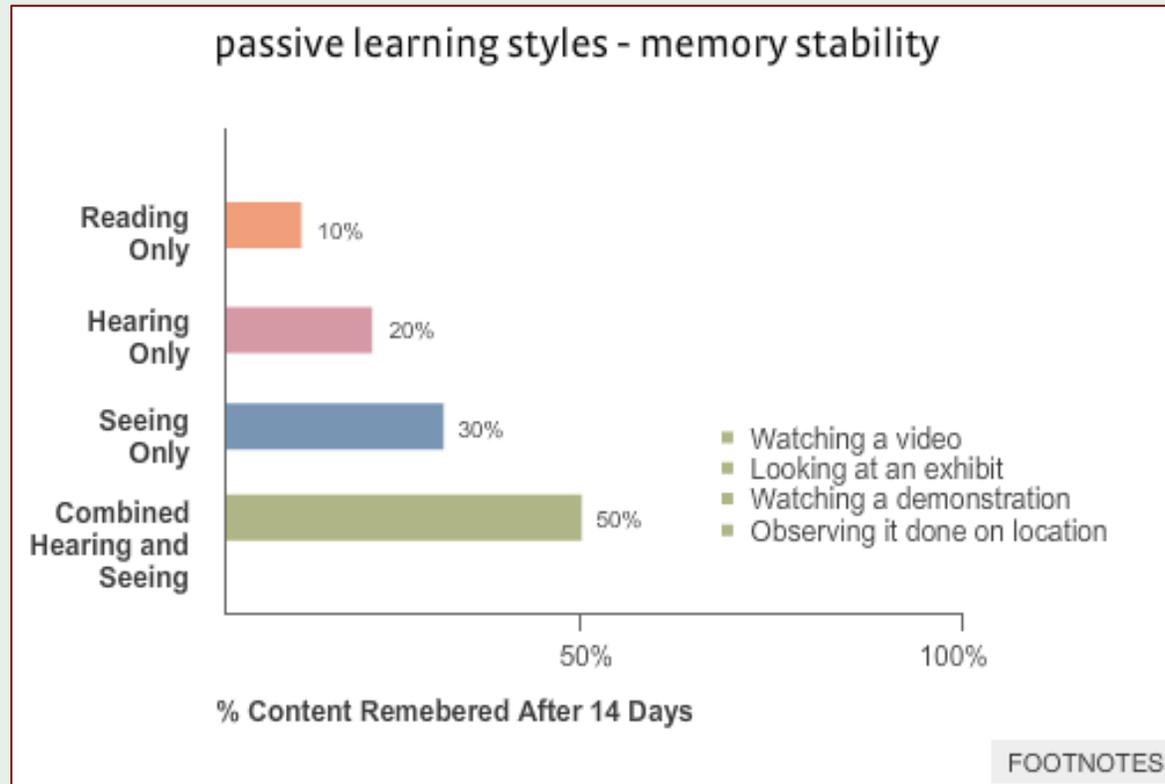




**Rule # 9**  
**Stimulate more of the senses.**



# Combining the senses helps make information meaningful



FOOTNOTES: Source- Edgar Dale "Audio-Visual Methods in Teaching" Holt, Rinehart and Winston  
Brain Rules by Dr. John Medina; more information at [www. Brainrules .net](http://www.Brainrules.net)

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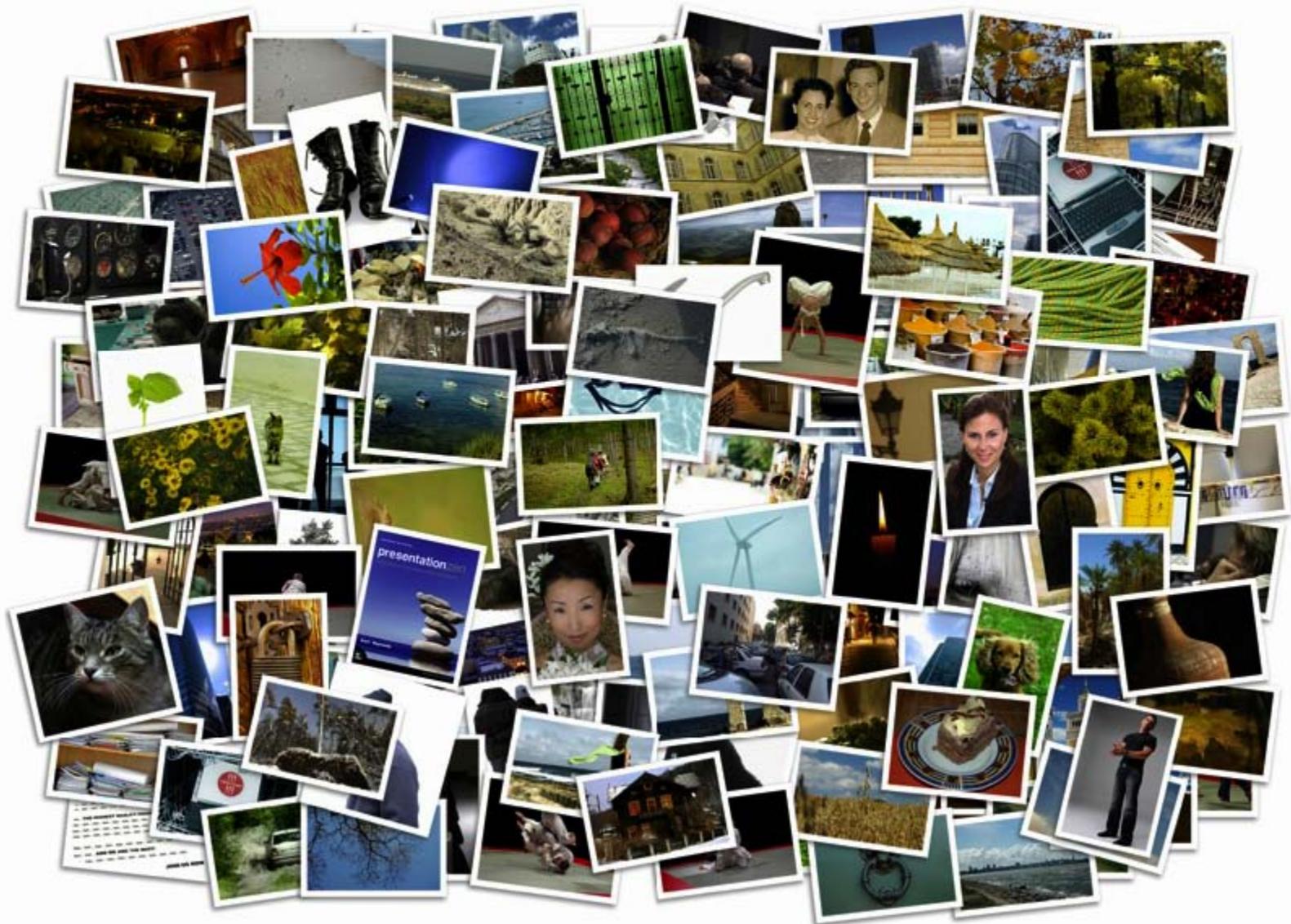
## Rule # 10

**Vision trumps all other senses.**

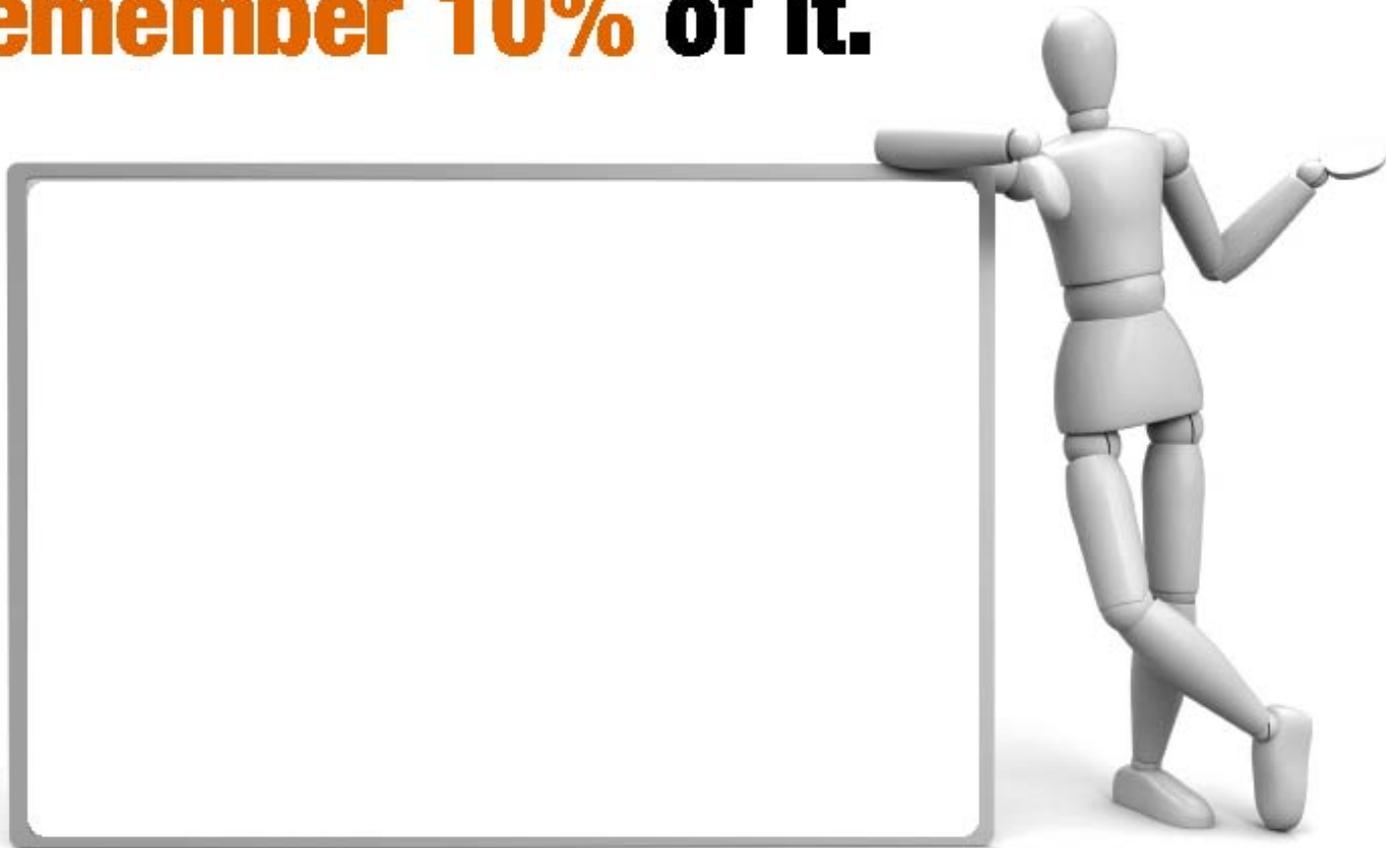
Fact: We have better recall for visual information



**We are incredible at remembering **pictures.****



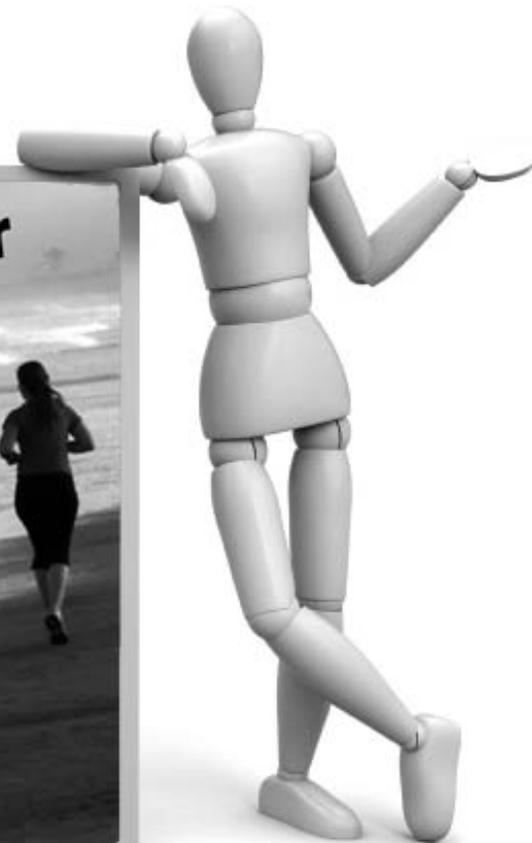
**Hear** a piece of information,  
and three days later you'll  
**remember 10%** of it.



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

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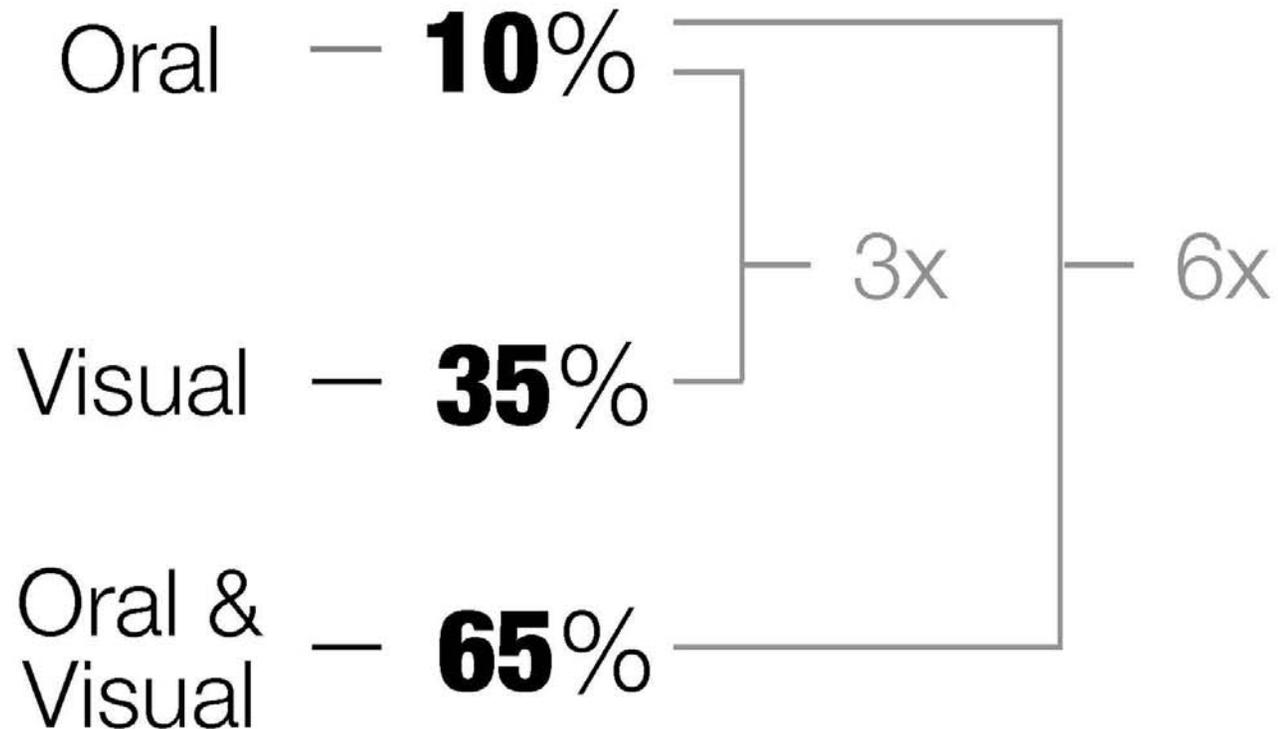
Add a **picture** and you'll  
**remember 65%.**



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

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# Rule of thumb

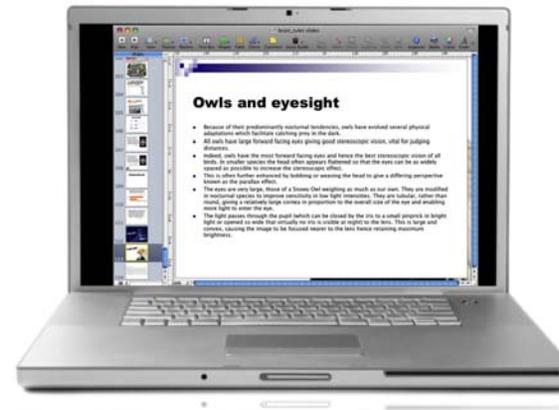


Source: Najjar, LJ (1998) Principles of educational multimedia user interface design (via *Brain Rules* by John Medina, 2008)

Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

## Thoughts to consider

# Pictures beat text



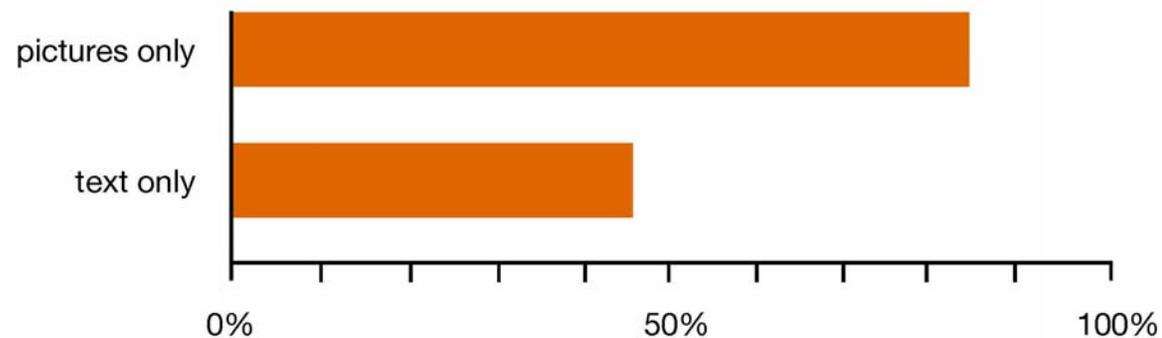
Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

## Where possible use pictures and text

### Recognition soars with pictures

“ Various studies show that recognition doubles for a picture compared with text. ”

— Dr. John Medina



source: [www.brainrules.net/vision](http://www.brainrules.net/vision)



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

## Thoughts to consider

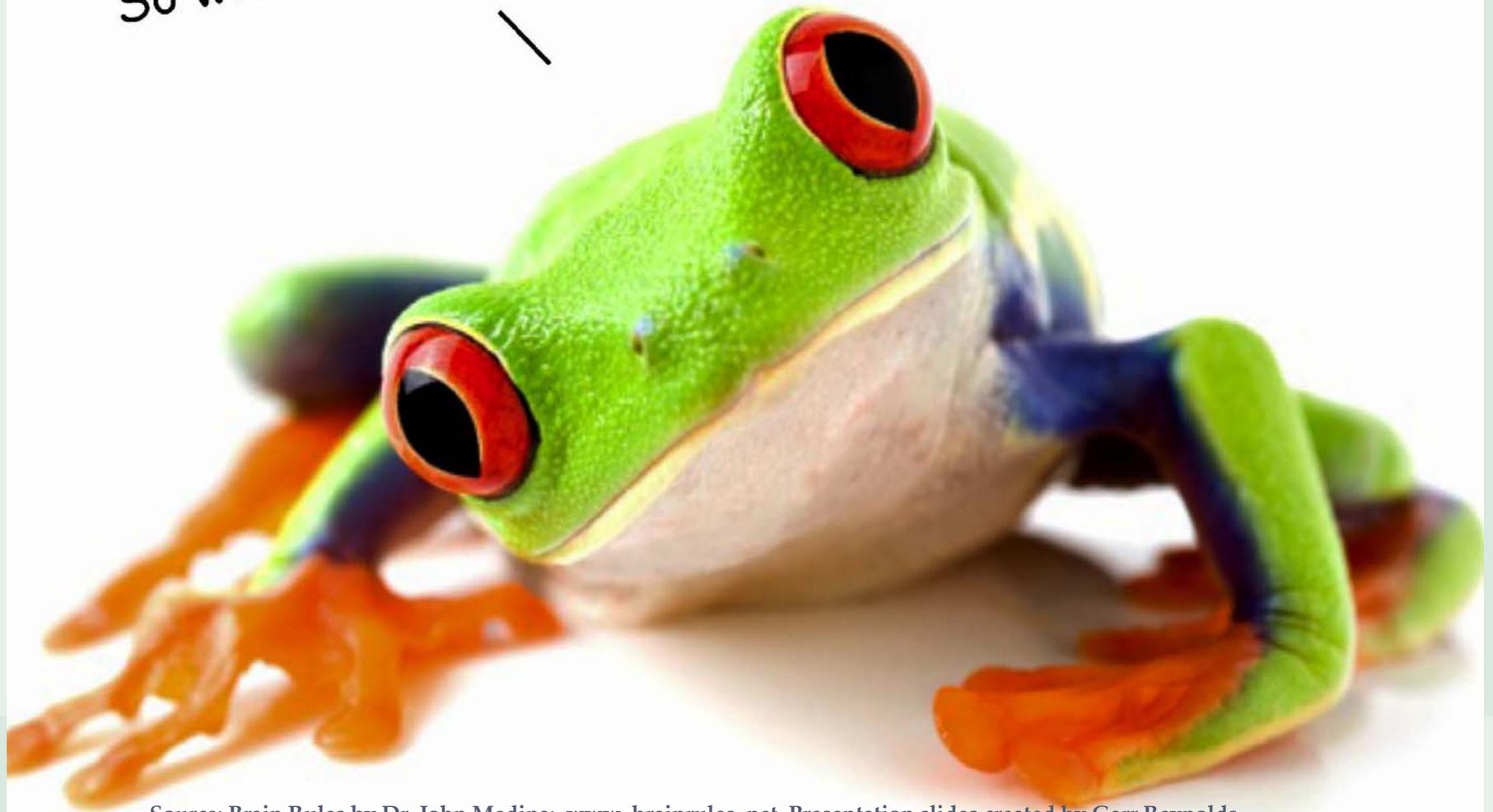
“ Pictures beat text...because reading is so inefficient for us. We have to identify certain features in the letters to be able to read them. That takes time. ”

— Dr. John Medina



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

So what have we learned?



Source: Brain Rules by Dr. John Medina; [www.brainrules.net](http://www.brainrules.net). Presentation slides created by Garr Reynolds.

## So what have we learned? A few suggestions



### Rule # 1

Focus on key ideas supported by a few facts.  
Connect the dots. Less is more.



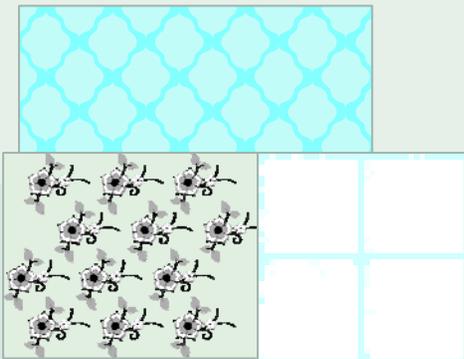
### Rule # 2

Repeat key points to remember.



### Rule # 3

Use visuals to reinforce key points; with audio  
even better.



### Rule # 4

Show consumers a pattern to aid learning.  
E.g. Benefit/Risk grid

## Using knowledge about how the brain comprehends could make it all more meaningful



- Balance between benefits and risk
- Improve understanding – catalyze real education
- Engage consumers in their healthcare learning



# Appendix



## Bio: Dr. John J. Medina

DR. JOHN J. MEDINA is a developmental molecular biologist focused on the genes involved in human brain development and the genetics of psychiatric disorders. He has spent most of his professional life as a private research consultant, working primarily in the biotechnology and pharmaceutical industries on research related to mental health. Medina holds joint affiliate faculty appointments at the [University of Washington School of Medicine](#), in its Department of Bioengineering, and at [Seattle Pacific University](#), where he is the director of the Brain Center for Applied Learning Research.

- Medina was the founding director of the [Talaris Research Institute](#), a Seattle-based research center originally focused on how infants encode and process information at the cognitive, cellular, and molecular levels.
- In 2004, Medina was appointed to the rank of affiliate scholar at the National Academy of Engineering. He has been named Outstanding Faculty of the Year at the College of Engineering at the University of Washington; the Merrill Dow/Continuing Medical Education National Teacher of the Year; and, twice, the Bioengineering Student Association Teacher of the Year. Medina has been a consultant to the Education Commission of the States and a regular speaker on the relationship between neurology and education.
- Medina's books include: [Brain Rules \(Pear Press\)](#), The Genetic Inferno, The Clock of Ages, Depression, What You Need to Know About Alzheimer's, The Outer Limits of Life, Uncovering the Mystery of AIDS, and Of Serotonin, Dopamine and Antipsychotic Medications.
- Medina has a lifelong fascination with how the mind reacts to and organizes information. As the father of two boys, he has an interest in how the brain sciences might influence the way we teach our children. In addition to his research, consulting, and teaching, Medina speaks often to public officials, business and medical professionals, school boards, and nonprofit leaders. He lives in Seattle with his wife and sons.



# Ellen Hoenig Carlson

## Bio

- Ellen Hoenig Carlson has been a leader and brand champion in consumer and pharmaceutical marketing for over two decades both on the client side and as a full service healthcare consultant. Her record of growth and innovation includes over thirty diverse prescription, device, OTC and consumer categories in the U.S. and internationally, spanning both developed and emerging markets.
- While at Bristol-Myers Squibb (BMS), Ellen held numerous assignments in Brand Management, New Products, Global Category Development, Business Development, and Vice President of Consumer/Patient (DTC/P) Marketing.
- In this last role, Ellen created the company's first Consumer/Patient Center of Excellence in 1997 and was responsible for driving positioning, strategy and execution of all DTC/P initiatives across BMS' ten billion dollar US Pharmaceutical business. This included such disease areas brands as Diabetes, Cardiovascular, Hypertension, Depression, Anxiety, HIV, Cancer, Antibiotics and Skincare. During this time she was twice recognized by *Advertising Age* Magazine as one of this country's 50 most powerful marketing executives 2000, 2001.
- In 2001, Ellen took her breakthrough approaches and established a consulting practice focused on powering pharmaceutical and consumer brand growth. Working with brand teams and partners, Ellen's overarching principle is to simplify the complexities of today's marketplace in order to drive growth and maximize ROI whether in the early-stage or at the end of the product life cycle.
- Ellen is a DTC pioneer, having worked consistently to spearhead DTC/P brand and educational initiatives since the FDA regulations changed in 1997. She's helped develop and implement upwards of 40 integrated DTC/P programs to spur awareness, education, conversion and retention.



For more information: [www.advancemarketworx.com](http://www.advancemarketworx.com)